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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/653,688	09/02/2003	Steven P. Nolan	A02194US (98016.23)	3477

22920 7590 11/22/2005

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EXAMINER

SHIAO, REI TSANG

ART UNIT	PAPER NUMBER
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1626

DATE MAILED: 11/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/653,688

Applicant(s)

NOLAN, STEVEN P.

Examiner

Robert Shiao

Art Unit

1626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on responses filed on 08/15, 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-20 is/are pending in the application.
- 4a) Of the above claim(s) 13 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-12 and 15-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This application claims benefit of the provisional application: 60/407,073 with a filing date 08/30/2002.
2. Amendment of claims 1-4, and 18-20, and cancellation of claims 5 and 21 in the amendment filed on August 15, 2005, is acknowledged. Claims 1-4, 6-20 are pending in the application.

Responses to Amendment/Arguments

3. Rejection of claims 3-4 under 35 U.S.C. 112, second paragraph, has been overcome in the amendment filed on August 15, 2005.
4. Rejection of claims 1-4, 6-12, and 15-20 under 35 U.S.C. 102(b) or 103 (a) over Arduengo et al. publication, Tetrahedron, 1999, 55:14523-14534, has been overcome in the amendment filed on August 15, 2005. Rejection of claims 1-4, 6-12, and 15-20 under 35 U.S.C. 102(b) over Jafarpour et al. publication, J. of Organometallic Chemistry, 2000, 606:49-54, has been overcome in the amendment filed on August 15, 2005. Since claim 5 has been canceled, therefore, rejection of claim 5 under 35 U.S.C. 102(b) or 103(a), is obviated herein.
5. Applicant's arguments regarding rejection of claims 1-4, 6-12, and 15-20 under 35 U.S.C. 112 paragraph, i.e., without limitation of "synthesizing or providing diimine compound", have been fully considered but they are not persuasive. Applicants argue that one of ordinary skill in this art could prepare an imidazolium salt compounds using other diimine compounds and other specifics than those explicitly set out in the

specification. However, applicants do not provide specific or substantial written description in the specification for enablement of a process preparing the instant imidazolium salt compounds using starting material other diimine compounds, or a compound other than the compound of formula (1) or (3). Therefore, rejection of claims 1-4, 6-12, and 15-20 under 35 U.S.C. 112 paragraph, is maintained. Incorporation of limitation "diimine compound" (i.e., formula (1) or (3)) into the claims, would obviate the rejection. Since claim 5 has been canceled, therefore, rejection of claim 5 under 35 U.S.C. 112, first paragraph, is obviated herein.

6. Applicant's arguments regarding rejection of claims 1-4, 6-12, and 15-20 under 35 U.S.C. 103(a) over Jafarpour et al. publication, J. of Organometallic Chemistry, 2000, 606:49-54, have been fully considered but they are not persuasive. Applicants argue that the instant processes are operated under a ring closure conditions at or below room temperature, while Jafarpour et al. processes are operated at elevated temperatures (i.e., 70°C). However, the Courts have decided per *In re Boesch*, 205 USPQ 215 (1980), that the optimization of variables, such as pH, pressure, temperature, and molar ratios, in a known process is prima facie obvious. Therefore, the claimed process would have been suggested to one skilled in the art.

The motivation to make the claimed compounds derives from the expectation that the instant claimed processes would possess similar yields from the known Jafarpour et al. processes to that which is claimed in the reference. Therefore, rejection of claims 1-4, 6-12, and 15-20 under 35 U.S.C. 103(a) over Jafarpour et al. publication,

J. of Organometallic Chemistry, 2000, 606:49-54, is maintained.

Objection

7. Claim 1, line 1, recites the term "imidazolium salt" without formulae, is objected. Incorporation of the compounds of formula (2) or (4), would obviate the objection, see claims 19-20.

8. Claims 19-20, line 3, recite the term "the salt", are objected. Replace the term "the salt" with the term "imidazolium salt" would obviate the objection.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

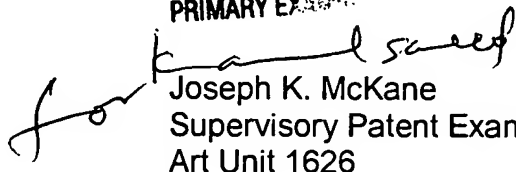
Telephone Inquiry


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Shiao whose telephone number is (571) 272-0707. The examiner can normally be reached on 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. McKane can be reached on (571) 272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KAMAL A. SAEED, PH.D.
PRIMARY EXAMINER


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Supervisory Patent Examiner
Art Unit 1626


Robert Shiao, Ph.D.
Patent Examiner
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October 05, 2005